

MEMORANDUM FOR: General Nichols/NIO/GPF
Room 2B49

NH

Gordon asked me to bring the attached article from Aviation Week and Space Technology to your attention. You may be interested in discussing this Air Force effort in connection with your SNIE. If so, OSWR would like to participate.

DD/SWR

STAT

Date 7 August 1985

USAF Moves to Identify Defense Options of Next 20 Years

By Robert R. Ropelewski

Washington—U. S. Air Force is undertaking a broadly focused six-month study to identify high-leverage technologies and future weapon system options to be pursued by the service over the next 20 years.

Called Project Forecast 2, the study is based on a similar effort conducted in 1963 under the designation Project Forecast (AW&ST Apr. 8, 1963, p. 25; Sept. 9, 1963, p. 28). That effort resulted in the Air Force giving priority in the succeeding years to such systems and technologies as reusable space vehicles, large cargo aircraft, composite materials, high-bypass engines and other technologies now in operational use.

Innovative Concepts

Project Forecast 2 will be a 20-year look ahead to produce for Air Force review a list of major defense capabilities that could be realized by exploiting emerging technologies and incorporating them in innovative systems concepts. The project is being directed by Gen. Lawrence A. Skantze, commander of the Air Force Systems Command. Skantze was a participant on the propulsion panel in the original Project Forecast.

The intent of the new Project Forecast, according to Skantze, is to examine through a series of technology panels "promising technologies, their feasibility

and predictability, and then, through an operational concepts panel, to look at desirable weapons system capabilities we would like to have and how they marry with those technologies."

It is not the intent, he said, "to try to produce a very structured five-year development program, but rather to be in a position to say, 'Here are the technologies that we need to push, to put the money behind, and here's where they are going to pay off.'"

Skantze said that since the original Project Forecast, this process has been left for the most part to the annual budgeting process.

"But that's a time-consuming, all-consuming activity," he noted. "While you do see those nuggets of technological opportunity coming, the people involved are consumed in the bureaucratic process of developing budgets and justifying and defending them. So that all-important ability to step aside and just think, broadly and out into the future, is not available in the current system. You have to break people away."

A full-time task force of 40-50 Air Force personnel with technical, operational and analytical skills is beginning work this week in a facility in Crystal City, Va., not far from the Pentagon, to conduct the study. It will be augmented by experts from various industry, government and academic institutions. Up to 200 people

are expected to be involved at any given time. A sum of \$2 million has been set aside from Fiscal 1985 defense funds for the project.

The bulk of the study will be accomplished by three separate panels covering technology, mission and analysis. The technology panel, to be headed by Brig. Gen. Charles F. Stebbins, deputy chief of staff, science and technology, Air Force Systems Command, will consist of 10 subpanels structured by engineering discipline. These will include:

- Propulsion and power.
- Materials and producibility.
- Vehicles and structures.
- Electronics and sensors.
- Information and processing.
- Armaments and weapons.
- Communications.
- Human factors and life sciences.
- Environmental sciences.
- Reliability/maintainability.

The mission panel, comprising five subpanels, will be chaired by Brig. Gen. Robert F. Durkin, deputy director of operations, headquarters USAF. Its five subpanels will address:

- Strategic offense.
- Strategic defense.
- Theater warfare.
- Low intensity warfare.
- Battle management.

The analysis panel, consisting of three subpanels for systems analysis, system costing and threat/red team, will be headed by Col. John Friel, commander of the Air Force space technology center.

Overview Role

In addition to this basic project structure, operational commanders have been invited to participate in the studies and a military overview committee consisting of the vice-commanders of all the various Air Force operational commands will oversee the progress of the studies. Further oversight and assistance will be provided by a senior advisory group consisting of retired military officers and civilians that will conduct periodic reviews of the project.

Skantze said there were a number of aspects of the forecast studies that were "particularly timely and exciting." Among these, he cited strategic defense initiative technology, which he predicted "is going to spawn some things that we in the Air Force need to look at for our own requirements."

The Project Forecast 2 studies are expected to be completed by February, 1986. □

Air Force Plans to Limit Tactical Fighter Costs

Washington—Senior Air Force officials expect to set a cap of around \$10 billion for research and development costs of the service's new advanced tactical fighter (ATF) and about \$40 million for the flyaway cost of each production aircraft.

Air Force Secretary Verne Orr recently gave the go-ahead to resume concept definition and preliminary development work on the ATF after keeping the program on hold for the past several months to examine budget and force structure issues affecting this and other Air Force fighter procurement programs (AW&ST July 22, p. 15).

Defense Systems Acquisition Review Council will meet in mid-August to review the ATF project, with a request for proposals for the technology demonstration/validation phase of the program anticipated in mid- to late September. Air Force officials expect to reduce the number of competitors in the ATF program from seven at present to three or four for the demonstration/validation phase.

The three-year demonstration/validation phase is longer than normal for this type of program, according to Gen. Lawrence Skantze, commander of the Air Force Systems Command, because of the need to get a firm fix on costs and performance.

He also acknowledged that pressures for more competition in Defense Dept. acquisition programs could result in the Air Force pressing for an industry teaming arrangement for advanced tactical fighter full-scale development and production.

"There's no question about it," he said. "We reserve that option completely. I suspect that when we get through the demonstration/validation phase, one of the requirements we might be looking at as part of the proposal for full-scale development would be a description of how the bidder would qualify a second source. To the extent that is affordable, I believe it's a common sense approach."